IN THE CLAIMS

This version of the claims replaces and supercedes all prior versions of the claims.

1.   (Currently Amended) In a cellular telephone system comprising at least one antenna for detecting a received signal and a signal processor for processing the received signal detected by the at least one antenna, a method of determining the amount of signal power and interference power in a received signal, the received signal having a wanted signal providing said signal power and a plurality of interfering signals providing said interference power, the wanted signal being encoded such that there is a channel structure including a data channel and a broadcast channel, the method comprising use of the signal processor in the steps of:

a)   selecting a plurality of first known structures in the wanted signal, said plurality of first known structures being identified using a further known structure within the broadcast channel to provide a signal having known periods with defined properties;

b)   processing the received signal in accordance with said plurality of first known structures to derive a set of amplitude values corresponding to the said first known structures; and

c)   using the set of amplitude values to determine both a signal power level and an interference [[the]] power level for at least a portion of the received signal.

2.   (Cancelled)

3.   (Currently Amended) A method according to claim 1, wherein and step a) includes identifying locations of [[a]]the further known structure within the wanted signal, and using the identified locations to derive the locations of said plurality of first known structures.

4.   (Previously Presented) A method according to claim 1, wherein said plurality of first known structures comprises Frequency Correction Bursts.

5.   (Original) A method according to claim 3, wherein said further known structure comprises sync bursts.

6.   (Previously Presented) A method according to claim 1, wherein the step of identifying said plurality of first known structures includes using pointers selected by said further known structure.

7.   (Original) A method according to claim 6, wherein said pointers are stored in a look-up table, and step a) includes using said pointers to select said plurality of first known structures in said received signal.

8.   (Currently Amended) A method according to claim [[7]]1, wherein step b) comprises correlating the received signal with said selected plurality of first known structures to derive said amplitude values.

9.   (Currently Amended) A method according to claim [[8]]1, wherein step c) comprises determining mean and variance values for said amplitude values.

10.   (Currently Amended) A method according to claim [[9]]1, wherein step c) further comprises using calibration factors to produce an absolute power value for the wanted signal.

11.   (Currently Amended) A method according to claim [[10]]1, wherein step c) further comprises using said calibration factors to produce an absolute power value for the interfering signals.

12.-26   (Cancelled)

27.   (New) A method according to claim 1, wherein said received signal comprises first and second, time co-incident received signals, said first received signal providing the further known structure used in step (a) and where step (b) comprising processing the second received signal to provide the set of amplitude values for determining the interference power level of the interference signals.